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Plan A completely specifies high school subjects needed for admission. Plan B only includes English and Algebra. While Plan B students have more academic trouble than Plan A students, many good ones enter under Plan B.

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A STUDY OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA

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The University of Arizona has two plans by which students are admitted to freshman standing, Plan A and Plan B. The two plans differ somewhat among the various colleges but, in all cases, Plan A specifies much more completely the particular high school subjects which must be offered by students seeking admission to the university. Requirements for Plan A include: English, 3 units; elementary algebra, 1 unit; plane geometry, 1 unit; history, 1 unit; laboratory science, 1 unit; electives, 6 units. In addition, two units of the same foreign language are also required on Plan A by some colleges. The only specific subject requirements for those who enter under Plan B are: English, 3 units; algebra, 1 unit. In addition, 6 units chosen from groups 1, 2, 3, 4, or 5, and 5 units of electives must also be offered by those entering under Plan B. A detailed summary of the above requirements is given on page 73 of the Biennial Catalogue for 1957-58, 1958-59.

Since the two plans are in use, it was felt that more should be known about the personal characteristics and educational progress of students who enter the university under each of the two admission plans. This report describes a study in which Plan A and Plan B entrants to the university were compared on a large number of personal and intellectual characteristics as well as on various criteria of academic progress at the university. Dr. David L. Patrick, Vice President of the University of Arizona, encouraged the writer to carry out the study and made available the financial assistance needed for clerical help in assembling the source material. The basic data were assembled from various records

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available in the Registrar's Office. This work was done under the direction of Mr. Arthur Grant of that office. Dr. A. Wayne Wymore, Director of the Numerical Analysis Laboratory, made the resources of the laboratory available for processing the data.

Subjects: The entire entering freshman class of 1953 was chosen for investigation. This group was chosen for several reasons. For one thing, four years have elapsed since this class entered and the four year record of those students who remained at the university was available. Secondly, this group is the most recent entering class which could be used and still have most of the desired information available. This 1953 entering class numbered 1,321 students, 772 men and 549 women. All of the tables presented in this report are based on the records of these students. There is no reason to believe that this class differed significantly from those which immediately preceded or followed it although this has not been established objectively.

Method: A code sheet for each member of the group was prepared in the Registrar's Office. Since the desired items of information were not accumulated in one place, this was a major undertaking. An intensive effort was made to locate information on all items for every member of the group. The code sheet was arranged in such a way as to facilitate punching the information on IBM cards. Since some of the information desired was already available on the IBM master cards in the Registrar's Office, these data were reproduced directly on to the data cards used in the study. The information from the code sheet was then added to the data card for each student by a punch operator. The result was a deck of 1,321 IBM cards, each containing the information pertaining to one student. The format of the cards is shown on the following page.

Columns	1- 5	Matriculation number
Columns	6- 7	Home state
Columns	8- 9	Arizona high school
Column	10	Veteran status
Column	11	Sex and marital status
Column	12	College
Columns	13-14	Major subject
Columns	15-16	Degree sought
Columns	17-18	Fraternity or sorority(00 if non-affiliated)
Columns	19-20	Year born
Column	21	Pre-professional program
Columns	22-23	Units
Column	24	Admission plan(1 for Plan A, 2 for Plan B)
Columns	25-26	Group I (number of units)
Columns	27-28	Group II "
Columns	29-30	Group III "
Columns	31-32	Group IV "
Columns	33-34	Group V "
Columns	35-36	Group VI "
Column	37	Rank in H. S. class (4 through 1, highest to lowest Quarter)
Column	38	College change (1 did not, 2 did)
Column	39	Grade in English X
Column	40	Grade in English 1a
Columns	41-42	Freshman grade average
Columns	43-44	Sophomore grade average
Columns	45-46	Junior grade average
Column	47	Drop out
Column	48	Times on probation
Column	49	Times disqualified
Column	50	Number of semesters completed
Columns	51-52	Graduation average
Columns	53-54	Cooperative English Test decile
Columns	55-56	ACE (Q score decile)
Columns	57-58	ACE (L score decile)
Columns	59-60	ACE (Total score decile)

After the IBM cards had been prepared for all students in the class, they were sorted to separate the Plan A and Plan B groups. The two groups were then compared on most of the characteristics for which data were available. Most of the comparisons are between all Plan A entrants and all Plan B entrants since the main effort of the study was to describe the personal characteristics, high school background, and academic progress in college of students in each of the two groups. It will be noted later that the two groups differed considerably in mental ability, achievement in English before entering the university, and standing in high school graduating class. It is therefore to be expected that Plan A entrants will earn higher grade averages in the university as in fact they do. It should be emphasized that differences in the grades earned at the university are not necessarily due to the particular Plan under which the students entered the university. An effort was made to equate sub-groups of Plan A and Plan B students on the basis of mental ability and/or English achievement and then compare them as to freshman grade average.

The results of all comparisons are presented in the tables which follow in the section on Findings. Brief explanations of how to read the tables are given as they are presented.

Findings: The tables which present the results of the comparisons are arranged in approximately the chronological order that the various data became available as the students progressed up the educational ladder. That is, the first tables show comparisons based on data from students' pre-university history. Next, comparisons based on data obtained from orientation week evaluation procedures are presented. Finally, tables showing comparisons based on various criteria of academic progress in the university are offered.

Table I below shows a comparison of Plan A and Plan B entrants to the University of Arizona on the basis of relative standing in the high school graduating classes from which they came.

TABLE I

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO WERE IN EACH OF THE FOUR QUARTERS OF THEIR HIGH SCHOOL GRADUATING CLASSES

Quarter of High School Class	Plan A		Plan B		Total	
	No.	%	No.	%	No.	%
Top	360	44.1	71	28.5	431	40.4
High Middle	213	26.1	78	31.3	291	27.3
Low Middle	153	18.7	53	21.3	206	19.3
Bottom	91	11.1	47	18.9	138	12.9
Totals	817	100.0	249	100.0	1,066	100.0
No Data	172	17.4	83	25.0	255	19.3
Grand Totals	989	100.0	332	100.0	1,321	100.0

It may be seen in the above table that the ratio of Plan A entrants to Plan B entrants is almost exactly three to one. The entries in the table are to be read as follows: For line 1, 360 or 44.1% of the freshmen entering the University of Arizona under Plan A stood in the highest quarter of their high school graduating classes while 71 or 28.5% of the Plan B stood in this quarter. It is obvious that a higher proportion of Plan A than Plan B students come from the top quarter of their high school graduating classes and that a higher proportion of Plan B than Plan A students come from the lowest quarter of their classes. It is of general interest to note the small proportion of UA students who are from the lowest quarter of their high school graduating classes.

Table II shows a comparison of Plan A and Plan B entrants to the university on the basis of sex.

TABLE II

NUMBERS AND PERCENTAGES OF MEN AND WOMEN WHO ENTERED THE UNIVERSITY OF ARIZONA UNDER PLAN A AND UNDER PLAN B

Sex	Plan A		Plan B	
	No.	%	No.	%
Male	557	56.3	215	64.8
Female	432	43.7	117	35.2
Both	989	100.0	332	100.0
% of total		74.9		25.1

It may be seen from the above table that relatively more men than women enter the university under Plan B. The reverse, of course, is true for Plan A. The proportion of all students using the two admission Plans may also be seen at the bottom of the table.

A further breakdown by sex and marital status is shown in Table III below.

TABLE III

SEX AND MARITAL STATUS OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA

Sex and Marital Status	Plan A		Plan B	
	No.	%	No.	%
Single Male	534	54.0	192	57.8
Married Male	23	2.3	23	6.9
Single Female	429	43.4	112	33.7
Married Female	3	0.3	5	1.5

It may also be seen in this table that a higher proportion of men than of women enter the university under Plan B. In addition, a slightly higher proportion of married than unmarried students enter the university under Plan B.

In Table IV the results of a comparison on the basis of residence may be seen.

TABLE IV

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO WERE RESIDENT AND NON-RESIDENT

Residence (Cols. 6-7)	Plan A		Plan B	
	No.	%	No.	%
Ariz.	618	62.5	228	68.7
Out of State	371	37.5	104	31.3
Total	989	100.0	332	100.0

An inspection of this table will show that a slightly higher proportion of Arizona than out-of-state students enter the university on Plan B.

The next two tables show the results of comparing Plan A with Plan B students on the basis of psychological test scores obtained during orientation week. The first of this series (Table V) compares the two groups on the basis of total score on a scholastic aptitude test. The test is the American Council on Education Psychological Examination which is widely used with college freshmen over the United States.

TABLE V

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO FELL IN EACH OF THE TEN DECILES ON THE AMERICAN COUNCIL ON EDUCATION PSYCHOLOGICAL EXAMINATION

ACE Total Score Decile (Cols. 59-60)	Plan A		Plan B	
	No.	%	No.	%
10	108	10.9	15	4.5
9	113	11.4	18	5.4
8	84	8.5	14	4.2
7	113	11.4	27	8.1
6	73	7.4	27	8.1
5	103	10.4	35	10.5
4	94	9.6	33	9.9
3	89	9.0	34	10.2
2	94	9.5	47	14.2
1	77	7.8	54	16.3
No Data	41	4.1	28	8.4
Total	989	100.0	332	99.8

It may be seen in Table V that a greater proportion of Plan A than Plan B students fall in the highest deciles on the ACE test. It follows that a higher proportion of the Plan B students fall in the lower deciles.

A somewhat similar comparison is shown in Table VI. Here the basis for comparison is the Cooperative English Test score which was also obtained during orientation week. The highest deciles represent the best performance on the test.

TABLE VI

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO FELL IN EACH OF THE TEN DECILES ON THE COOPERATIVE ENGLISH TEST

Cooperative English Test Decile	Plan A		Plan B	
	No.	%	No.	%
10	107	10.8	15	4.5
9	92	9.3	23	6.9
8	93	9.4	19	5.7
7	89	9.0	28	8.4
6	111	11.2	25	7.5
5	82	8.3	27	8.1
4	99	10.0	33	9.9
3	82	8.3	34	10.2
2	70	7.1	51	15.4
1	78	7.9	49	14.8
No Data	86	8.7	28	8.4
Total	989	100.0	332	99.8

The results shown in this table are similar to the results based on the comparison of scholastic aptitude test scores. That is, Plan A students, as a group, perform better on the English test than do the Plan B students. It should be noted however that over one third of the Plan B students earn scores in the top five deciles of the test.

Table VII compares the numbers and percentages of Plan A and Plan B entrants who chose various pre-professional programs.

TABLE VII

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO CHOSE VARIOUS PRE-PROFESSIONAL PROGRAMS

Pre-Professional Program (Col. 21)	Plan A		Plan B	
	No.	%	No.	%
Pre-Educ.	117	11.8	44	13.3
Pre-Law	29	2.9	14	4.2
Pre-Dent.	22	2.2	4	1.2
Pre-Med.	33	3.3	7	2.1
Pre-Nurse	5	0.5	2	0.6
Pre-Pharm.	18	1.8	8	2.4
Pre-Forestry	2	0.2	0	0.0
None	763	77.1	253	76.2
Total	989	99.8	332	100.0

It may be seen in the table that only very minor differences exist here. Also, most of the numbers are so small here that the percentages based on them are likely not to be very stable, It should be observed that less than one-fourth of the total group stated that they were entering upon a pre-professional program.

Table VIII shows the numbers and percentages of Plan A and Plan B entrants who entered each of the several colleges of the University of Arizona which accept freshmen.

TABLE VIII

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO ENTERED EACH OF THE SEVERAL COLLEGES

College Registered in (Col. 12)	Plan A		Plan B	
	No.	%	No.	%
Agric.	53	5.4	12	3.6
Home Ec.	45	4.6	3	0.9
BPA	191	19.3	104	31.3
Engin.	193	19.5	15	4.5
F.A.	43	4.3	19	5.7
Music	12	1.2	12	3.6
L.A.	432	43.7	165	49.7
Mines	20	2.0	2	0.6
Total	989	100.0	332	99.9

An inspection of this table shows that there are some distinct differences in the proportions of Plan A and Plan B students who enter some of the colleges.

The two groups were also compared on the basis of military status and the results are presented in Table IX on the following page.

TABLE IX

THE MILITARY SERVICE STATUS OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA

Service Status (Col. 10)	Plan A		Plan B	
	No.	%	No.	%
GI. Bill	11	1.1	7	2.1
P. L. 16	9	0.9	5	1.5
Korean (550)	37	3.7	34	10.2
Korean (894)	4	0.4	3	0.9
Vet. (No Benefits)	6	0.6	3	0.9
Non-Vet.	922	93.2	280	84.3
Total	989	99.9	332	99.9

It may be seen in this table that veterans total only about ten per cent of the combined groups. Thus the numbers of veterans in the various categories are so small that their stability is open to question. When all categories are combined, it may be seen about seven per cent of all Plan A entrants are veterans while about sixteen per cent of all Plan B entrants are veterans. Thus the proportion of veterans entering under Plan B is more than twice the proportion of veterans entering under Plan A.

The next few tables compare the two groups on various criteria of academic success at the university. Table X on the following page compares Plan A and Plan B students on the basis of freshman year grade averages.

TABLE X

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO EARNED SELECTED GRADE AVERAGES

Freshman Grade Average (Cols. 41-42)	Plan A		Plan B	
	No.	%	No.	%
1.00 - 1.49	46	4.7	5	1.5
1.50 - 1.99	77	7.8	21	6.3
2.00 - 2.49	144	14.6	30	9.0
2.50 - 2.99	199	20.1	47	14.2
3.00 - 3.49	231	23.4	71	21.4
3.50 - 3.99	128	12.9	57	17.2
4.00 - 4.49	81	8.2	42	12.6
4.50 - 4.99	23	2.3	28	8.4
5.00	22	2.2	15	4.5
No Data	38	3.8	16	5.3
Total	989	100.0	332	100.4

An examination of this table shows that Plan A students, as a group, perform better academically than do Plan B students. If grade averages above and below 3.50 are examined, for example, it may be seen that 70.6% of Plan A students earn grade averages better than 3.50 while only 42.4% of Plan B students perform similarly. It follows from this that 29.4% of Plan A students fall below 3.50 while 57.6% of Plan B students earn grade averages in this range.

Table XI compares the two groups on the grade earned in English 1a. These comparisons are based only on students who actually completed English 1a. Since relatively more of the Plan B group never got to English 1a, it is believed that the available data show Plan B students in a relatively better light than would be the case if all of both groups had completed English 1a.

TABLE XI

A COMPARISON OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA ON THE GRADE EARNED IN ENGLISH 1a

English 1a Grade (Col. 40)	Plan A		Plan B	
	No.	%	No.	%
1	45	5.1	6	2.3
2	150	17.0	35	13.3
3	409	46.4	94	35.6
4	198	22.4	75	28.4
5	80	9.1	54	20.5
Sub Total	882	100.0	264	100.1
No Data	107	10.8	68	20.5
Total	989		332	

It may be noted, in the above table, that there are significant differences between Plan A and Plan B students in the proportions of each who earn grades of one (1) and five (5).

Table XII shows a comparison of the two groups on the basis of the grade earned in English X. The proportion of each group which was required to take English X is also shown.

TABLE XII

A COMPARISON OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA ON THE GRADE EARNED IN ENGLISH X

English X Grade (Col. 39)	Plan A		Plan B	
	No.	%	No.	%
1	2	1.6	2	2.2
2	10	8.1	3	3.3
3	33	26.8	15	16.3
4	42	34.1	37	40.2
5	36	29.3	35	38.0
Tot. in Eng. X	123		92	
Grand Tot.	989		332	
% in Eng. X		12.4		27.7

It may be seen from the data in this table that, as a total group, Plan A students perform better in English X than do Plan B students.

Table XIII presents data on the number of times that Plan A and Plan B students went on probation.

TABLE XIII

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO HAVE BEEN ON ACADEMIC PROBATION

Times on Probation (Col. 48)	Plan A		Plan B	
	No.	%	No.	%
0	591	59.8	184	55.4
1	149	15.1	69	20.8
2	84	8.5	28	8.4
3	40	4.0	19	5.7
4	11	1.1	7	2.1
5	2	0.2	2	0.6
6	1	0.1	0	0.0
7	0	0.0	0	0.0
8	1	0.1	0	0.0
No Data	110	11.1	23	6.9
Total	989	100.0	332	99.9

It may be seen here that the percentage of Plan B students who go on probation is slightly higher than for Plan A. In view of other data already presented it is rather striking that the differences shown in the above table are not considerably greater than they are.

Table XIV is similar to the table just presented. Here the comparisons are based on academic disqualification rather than on probations.

TABLE XIV

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO WERE GIVEN ACADEMIC DISQUALIFICATIONS

Times Disqualified (Col. 49)	Plan A		Plan B	
	No.	%	No.	%
0	768	77.7	264	79.5
1	72	7.3	33	9.9
2	22	2.2	6	1.8
3	4	0.4	1	0.3
No Data	123	12.4	28	8.4
Total	989	100.0	332	

Again it may be noted that the numbers and percentages of disqualifications are not very different between the Plan A and Plan B students.

The next table (Table XV) presents data comparing Plan A and Plan B students on the number of semesters completed at the University of Arizona.

TABLE XV

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO COMPLETED VARIOUS NUMBERS OF SEMESTERS AT THE UNIVERSITY OF ARIZONA

Semesters Completed (Col. 50)	Plan A		Plan B	
	No.	%	No.	%
9	37	3.7	11	3.3
8	283	28.6	53	16.0
7	35	3.5	8	2.4
6	66	6.7	18	5.4
5	32	3.2	10	3.0
4	122	12.3	45	13.6
3	65	6.6	33	9.9
2	168	17.0	72	21.7
1	82	8.3	42	12.7
0	43	4.3	20	6.0
No Data	56	5.7	20	6.0
Total	989	99.9	332	100.0

A very similar type of comparison is shown in Table XVI. Here, the numbers and percentages of drop-outs among Plan A and Plan B students are compared.

TABLE XVI

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO DROPPED OUT OF THE UNIVERSITY

Drop-Out Status (Col. 47)	Plan A		Plan B	
	No.	%	No.	%
Did	622	62.9	260	78.3
Did Not	353	35.7	69	20.8
No Data	14	1.4	3	0.9
Total	989	100.0	332	100.0

It may be seen here that a significant difference between the two groups exists with respect to the number who drop out of the university.

Plan A and Plan B students were also compared on the basis of the proportion of each group who changed colleges while at the university. The data on this item are presented in Table XVII.

TABLE XVII

NUMBERS AND PERCENTAGES OF PLAN A AND PLAN B ENTRANTS TO THE UNIVERSITY OF ARIZONA WHO CHANGED COLLEGES

Change of College (Col. 38)	Plan A		Plan B	
	No.	%	No.	%
Changed	281	28.4	108	32.5
Did not Change	691	69.9	217	65.4
No Data	17	1.7	7	2.1
Total	989	100.0	332	100.0

It may be seen here that Plan A students are not differentiated very sharply on this criterion.

The graduation grade averages of the two groups are now compared in Table XVIII.

TABLE XVIII

A COMPARISON OF THE NUMBERS
AND PERCENTAGES OF PLAN A
AND PLAN B ENTRANTS TO THE
UA WHO EARNED SELECTED GRADE AVERAGES

Graduation Average (Cols. 51-52)	Plan A		Plan B	
	No.	%	No.	%
1.00 - 1.49	29	8.6	2	3.4
1.50 - 1.99	58	17.1	9	15.5
2.00 - 2.49	99	29.2	22	37.9
2.50 - 2.99	128	37.8	22	37.9
3.00 - 3.20	25	7.4	3	5.2
Usable Total	339	100.1	58	99.9
Did Not Graduate	650		274	
Grand Total	989		332	
No. Graduated	339		58	
% Graduated		34.3		17.5

It can be noted in this table that Plan A students have somewhat higher graduation grade averages than do Plan B students. It is also possible here to compare the numbers and percentages of the two groups who have graduated. It may be seen that the proportion of Plan A students who have graduated is twice that for the Plan B group. Since some of both groups are still attending the university, these figures should not be regarded as final.

In Table XIX on the following page, the relationship between freshman year grade averages and relative position in high school graduating class is brought out. These comparisons

are based on all students (Both Plan A and Plan B) for whom data was available on relative position in high school graduating class.

TABLE XIX

EXPECTANCY GRID SHOWING THE RELATIONSHIP BETWEEN STUDENTS' STANDING IN THEIR HIGH SCHOOL GRADUATING CLASS (QUARTER) AND THEIR GRADE AVERAGES EARNED IN THE FRESHMAN YEAR AT THE UNIVERSITY OF ARIZONA*

Quarter of H. S. Class / Frosh. Grade Av.	1 %	2 %	3 %	4 %
1.00 - 1.49			0.4	11.0
1.50 - 1.99		3.0	2.5	15.7
2.00 - 2.49	2.3	5.5	9.0	25.0
2.50 - 2.99	8.3	15.1	29.2	21.9
3.00 - 3.49	19.5	32.7	30.3	16.0
3.50 - 3.99	21.1	18.6	17.7	7.6
4.00 - 4.49	28.6	17.6	5.4	1.7
4.50 - 4.99	14.3	3.5	2.5	0.7
5.00	6.0	4.0	2.9	0.5
Total	133	199	277	420

* Note: Table entries are in percentages. The actual number of students involved is shown at the bottom of each column.

As is to be expected, students who rank high in their high school graduating classes earn very significantly higher freshman year grade averages at the University of Arizona than do those ranking low. By combining percentages it may be seen that 73.6% of all students in the upper one quarter of their high school graduating classes earned a freshman year grade average of better than 3.00. On the other hand, only 10.6% of all students ranking in the lowest one quarter of their high school graduating classes earned a grade average of better than 3.00.

An attempt was made to equate sub-groups of Plan A and Plan B entrants on various bases and then compare them on the basis of the freshman year grade average. Table XX below shows the results of such a comparison. To get the data for this comparison, the IBM cards were first sorted to separate the cards which all contained: 1) a decile position on the American Council on Education Psychological Examination, 2) a decile position on the Cooperative English Test, and 3) a freshman grade average. Two hundred and fifty-three of the Plan B cards were this complete. Cards were randomly drawn from the Plan A group until an equal sized group of Plan A cards was accumulated. This was done decile by decile so that the net result was a set of Plan A cards containing the same number of cards on each decile of the test as was contained in the Plan B group. Both groups were then sorted to put them in order on the basis of freshman year grade average. The grade average at each of three percentiles was then determined for each group.

TABLE XX

A COMPARISON OF PLAN A AND PLAN B ENTRANTS, MATCHED ON THE BASIS OF COOPERATIVE ENGLISH TEST DECILE, ON THE BASIS OF FRESHMAN YEAR GRADE AVERAGES

Percentile (based on Grade Averages)	Plan A Grade Averages	Plan B Grade Averages
75th (P_{75})	2.5	2.6
50th (Median)	3.1	3.3
25th (P_{25})	3.6	3.9

It may be seen in the above table that such differences as there are in freshman year grade averages, are in favor of the Plan A group. It will also be noted that the differences are larger at the low end of the grade average distribution. Again it should be pointed out that matching on only one variable (Cooperative English Test scores) does not guarantee

that the groups are alike in all other respects except the Plan under which they entered the university. The data do show that, even when Plan A and Plan B groups are matched on ability in English, the Plan A students earn somewhat higher grade averages than do the Plan B students. Also, the differences in earned grade averages is considerably greater at the low end of the grade distribution than at the high end.

A similar comparison was made when the groups were matched on the basis of scholastic aptitude as judged by the ACE test. Here again the Plan A cards were randomly sampled, decile by decile, until a group equal in size to the Plan B group used was accumulated. The net result of these procedures was a set of 277 Plan A cards having the same distribution of ACE scores as the Plan B group. Table XXI below shows the comparative grade averages earned by the two groups.

TABLE XXI

A COMPARISON OF PLAN A AND PLAN B ENTRANTS, MATCHED ON THE BASIS OF SCHOLASTIC APTITUDE, ON THE BASIS OF FRESHMAN YEAR GRADE AVERAGES

Percentile (from grade average distribution)	Plan A Grade Averages	Plan B Grade Averages
75th (P_{75})	2.5	2.6
50th (median)	3.0	3.3
25th (P_{25})	3.5	4.0

The evidence presented in this table parallels that in the previous table. Again there is little difference between the groups at the upper end of the grade distribution and again the differences become progressively greater toward the lower end of the grade distribution. Again it should be emphasized that the Plan under which the students entered the university is not the only variable which may be operating. What seems

clear is that, when Plan A and Plan B students are equated on the basis of scholastic aptitude (as judged by the American Council on Education Psychological Examination), the two groups still differ somewhat in the grade averages earned, particularly at the low end of the grade distribution.

One final attempt was made to equate groups of Plan A and Plan B students on both the ACE test decile and the Cooperative English test decile. Here the Plan A and Plan B cards were sorted to identify groups which were about equivalent in both scholastic aptitude and ability in English. The two groups were then compared in freshman year grade averages earned as shown in Table XXII below.

TABLE XXII

GRADE AVERAGE COMPARISONS OF PLAN A AND PLAN B ENTRANTS MATCHED ON THE BASIS OF SCHOLASTIC APTITUDE AND ENGLISH ABILITY

Percentile (based on grade averages)	Plan A Grade Averages	Plan B Grade Averages
75th (P_{75})	2.6	2.7
50th (median)	3.1	3.4
25th (P_{25})	3.6	4.0

The picture here is quite like that presented in the two previous tables. The differences favor the Plan A group and become progressively greater toward the low end of the grade distribution.

Summary: A comparative study has been made of students who entered the University of Arizona under Plan A and those who entered under Plan B. The entire entering freshman class of 1953 was studied since four year records have now been accumulated for members of this group. Various items of personal information, certain psychological test scores, and

several criteria of academic progress in the university were used as bases for the comparisons. Differences were found between the two groups on many of the comparisons. The fact that such differences were found does not prove, of course, that the differences can be attributed to the Plan under which the students entered the university. The fact which has been established is that there are differences. It is clear that a higher proportion of Plan B than Plan A students have academic difficulties of one kind and another. The study is primarily a descriptive one and was aimed at discovering whether or not the two groups differed in any respect. It was found that they did differ in some respects as documented in the previous section. It is important to recall that there was a very considerable overlap between the two groups (Plan A and Plan B) on every characteristic considered even though the group averages differed.

By way of summarizing the overall comparisons, in which all Plan A students were compared with all Plan B students, it may be stated that the group of students who entered the University of Arizona under Plan A, as compared with those who entered under Plan B:

1) stood relatively higher in their high school graduating classes.

2) included relatively more women than men.

3) included relatively fewer married students.

4) included relatively more out-of-state students.

5) ranked relatively higher on the American Council on Education Psychological Examination, a test of scholastic aptitude.

6) ranked relatively higher on the Cooperative English Test.

7) tended to enter some colleges to a greater extent than others.

8) had relatively fewer students covered by one or another of the several bills offering benefits to veterans.

9) earned relatively higher grade averages.

10) earned relatively higher grades in English la.

11) earned relatively higher grades in English X (those who took it).

12) went on probation somewhat less frequently.

13) persisted to the point of graduation more frequently, and conversely, dropped out of the university less frequently.

14) changed college slightly less frequently.

15) contained relatively more students who had graduation grade averages of 2.0 or better.

In summarizing the comparisons where an attempt was made to equate sub-groups of Plan A and Plan B students on various bases, it may be said that the differences found were in favor of the Plan A group. The differences were minor among the better students but increased toward the low end of the grade distributions.

One of the striking findings was the great amount of overlap between Plan A and Plan B students on practically every characteristic. There were group differences, practically all of which were in favor of the Plan A students. However, the overlap was so great that it seems safe to conclude that while Plan B students, as a group, have more academic difficulties than do Plan A students, a large number of good students also enter the university under Plan B.